

Message

From: Detlef Knappe [knappe@ncsu.edu]
Sent: 2/20/2018 1:11:56 PM
To: Hopkins, Zachary [zrhopkin@ncsu.edu]; Strynar, Mark [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=5a9910d5b38e471497bd875fd329a20a-Strynar, Mark]; McCord, James [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=McCord, James]
Subject: Fwd: First Report on the Occurrence and Bioaccumulation of Hexafluoropropylene Oxide Trimer Acid: An Emerging Concern

Zack,

Can you look for the trimer acid in the surface water samples you collected around Chemours (see conversation below). Also, this one:

http://www.chemspider.com/Chemical-Structure.93034.html?rid=6958f0c5-c6d3-41b5-a44d-4e15471a7f9a&page_num=0

and Nafion BP1. Higher air emissions than BP2 according to Chemours model. Hopefully can do BPs 3 and 4 as well.

Detlef

----- Forwarded message -----

From: Strynar, Mark <Strynar.Mark@epa.gov>

Date: Tue, Feb 20, 2018 at 7:32 AM

Subject: RE: First Report on the Occurrence and Bioaccumulation of Hexafluoropropylene Oxide Trimer Acid: An Emerging Concern

To: "Cahoon, Larry" <cahoon@uncw.edu>, "Detlef R. U. Knappe" <knappe@ncsu.edu>, "Mead, Ralph N." <meadr@uncw.edu>

All,

I have looked for this compounds in the samples we have received in the Cape fear River all summer. I have yet to see a definitive response in any sample. However, it demands a more thorough look. My guess is it would be significantly less soluble than HFPO-DA and would likely be found more in sediment and or bio-accumulate in fish. Both have not yet been looked at by me or anyone else I am aware of.

According to my discussions with Dupont and Chemours chemists they are aware this compound is quite bio-accumulative and has toxicology. Thus they avoid the production. As it would be made to some degree by the process of dimerizing HFPO to the DA, some HFPO-TA is likely made. My understanding is they are able to capture the HFPO-TA and convert it to CAS 3330-14-1 (essentially the decarboxylated from of HFPO-TA) to be used as a solvent for Nafion synthesis on site. This tells me it is made on site but dealt with. My question would be to what degree and how well is it or has it been dealt with.

Mark

From: Cahoon, Larry [mailto:cahoon@uncw.edu]

Sent: Monday, February 19, 2018 11:16 AM

To: Detlef R. U. Knappe <knappe@ncsu.edu>; Strynar, Mark <Strynar.Mark@epa.gov>; Mead, Ralph N. <meadr@uncw.edu>

Subject: FW: First Report on the Occurrence and Bioaccumulation of Hexafluoropropylene Oxide Trimer Acid: An Emerging Concern

Hi guys, are we at all likely to see this stuff in the CFR?

LBC

From: Kathleen Gallagher [mailto:gallagherkm1@gmail.com]

Sent: Sunday, February 18, 2018 11:08 AM

To: Cahoon, Larry <cahoon@uncw.edu>

Subject: First Report on the Occurrence and Bioaccumulation of Hexafluoropropylene Oxide Trimer Acid: An Emerging Concern

<https://pubs.acs.org/doi/abs/10.1021/acs.est.7b02259>

FYI